

CDPS-UA1H10HS 1 by 10 HDMI Splitter with HDCP 2.2









DISCLAIMERS

The information in this manual has been carefully checked and is believed to be accurate. Cypress Technology assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Cypress Technology assumes no responsibility for any inaccuracies that may be contained in this document. Cypress also makes no commitment to update or to keep current the information contained in this document.

Cypress Technology reserves the right to make improvements to this document and/or product at any time and without notice.

COPYRIGHT NOTICE

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means electronic, mechanical, magnetic, optical, chemical, manual, or otherwise—without express written permission and consent from Cypress Technology.

© Copyright 2011 by Cypress Technology.

All Rights Reserved.

Version 1.1 August 2011

TRADEMARK ACKNOWLEDGMENTS

All products or service names mentioned in this document may be trademarks of the companies with which they are associated.



SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	Y SUMMARY OF CHANGE	
VRO	18/06/15 Preliminary Release		
VS1	22/07/15	Updated text & diagrams	



CONTENTS

1.	Introduction	1
2.	Applications	1
3.	Package Contents	1
4.	System Requirements	1
5.	Features	2
6.	Operation Controls and Functions	2
	6.1 Front Panel	2
	6.2 Rear Panel	3
7.	Connection Diagram	4
8.	Specifications	5
	8.1 Technical Specifications	5
	8.2 Supported Resolutions	6



1. INTRODUCTION

This 1 by 10 HDMI Splitter with HDCP 2.2 is an advanced solution for splitting a single HDMI input to up to ten HDMI outputs. It provides high performance audio and video output through HDMI cables supporting resolutions up to 4K2K@60Hz_YUV420 and is capable of receiving and transmitting up to 9Gbps of bandwidth with no data loss. With support fort the latest features you can be assured of reliable and high quality HDMI distribution.

2. APPLICATIONS

- Split a single HDMI input to ten HDMI displays
- Showroom display
- Educational demo
- Commercial advertisement

3. PACKAGE CONTENTS

- 1 By 10 HDMI Splitter
- 5V/6A Power Adaptor
- Power Cord
- Operational Manual

4. SYSTEM REQUIREMENTS

HDMI source equipment such as DVD/Blu-ray player and output HD display/Monitor with HDMI cables.



5. FEATURES

- HDMI (with 3D & 4K2K support) and HDCP2.2/1.4 compliant
- Supports HDTV resolutions up to 4Kx2K (3840x2160@24/25/30, 3840x2160@50/60 YUV_420 & 4096x2160@24/25/30, 4096x2160@50/60 YUV_420) and PC resolutions up to WUXGA@60Hz(RB)
- Supports HDMI data rates up to 9Gbps and 'Deep Color' up to 1080p/36-bit
- Supports simultaneous output on up to ten HDMI connections
- Supports pass-through of high definition audio formats: LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH, DTS Surround, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos and DTS-HD Master Audio
- Supports EDID selection functions
- Supports CEC system reset functions

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



1 POWER LED: This LED will illuminate in green when the device is powered On.

2 SYNC IN LED: This LED will illuminate when the device is connected to an active HDMI source signal.

- **3 HDCP 2.2 IN LED:** This LED will illuminate when the source signal is HDCP 2.2 encrypted.
- HDCP 2.2 LED 1~10: These LEDs will illuminate when the output HDMI displays are HDCP 2.2 encrypted.
- 5 SYNC LED 1~10: These LEDs will illuminate when the Hot-Plug Detection (HPD) signal from the display TV/monitors is detected.





- HDMI IN: Connect to HDMI equipped source equipment such as a Blu-ray player, games console, Set-top Box or any HDMI equipped source device.
- 2 HDMI OUT 1~10: Connect to HDMI TVs/displays or AV receiver for output of video and/or audio.
- **3 SERVICE:** This slot is reserved for firmware update use only.
- 4 SYS. RESET ON/OFF: Set this switch to the ON position will allow the device to reset the output image with the source every 10 minutes.

It will force the connected TV/display to switch to the HDMI port that the device is connected to ensure the correct input is always displayed. The reset will be performed sequentially from 1~10 with 1 minute a port. The default setting is OFF, leave as it is to disable the reset function.

Note: TV/monitor must have CEC compatibility for this feature to function properly.

5 EDID STD/TV: Use this switch to set HDMI EDID's setting.

TV: When in 'TV' mode, the unit will read the EDID settings of the display device connected to HDMI OUT 1. If it detects a 4K×2K capable EDID setting it will transmit the signal in that format to all outputs. If no 4K×2K capable EDID is detected then the unit will output the best resolution that all displays can support.

NOTE: When Output 1 is connected to a 4Kx2K display and Outputs 2–4 are connected to non-4K displays no picture may be displayed. To ensure proper display all screens must all be capable of displaying the same resolution.

STD: When in 'STD' mode, the unit will use its own built-in EDID settings. In this mode, the video output will be set to 1080p@60Hz and the audio output at LPCM 2CH Stereo. Use this mode if there are display problems in TV Mode.

6 DC 5V: Connect the adaptor included in the package and connect to AC wall outlet for power supply.



7. CONNECTION DIAGRAM





8.1 Technical Specifications

Video Bandwidth Input Ports Output ports HDMI I/O Cable Length Power Supply	300 MHz/9 Gbps 1×HDMI, 1×USB (Service only) 10×HDMI 10m@1080p, 5m@4K2K 5V/6 A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human Body model:
	±8kV (air-gap discharge)
	±4kV (contact discharge)
Dimensions	436 mm (W)×160 mm (D)×44 mm (H)/Jacks
	Excluded
	436 mm (W)×165.5 mm (D)×49 mm (H)/Jacks
	Included
Weight	1856 g
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0 °C~40 °C / 32 °F~104 °F
Storage temperature	−20°C~60°C / −4 °F~140 °F
Relative Humidity	20~90 % RH (no condensation)
Power Consumption	16W

9. ACRONYMS

ACRONYM	COMPLETE TERM	
DTS	Digital Theater System	
EDID	Extended Display Identification Data	
HDCP	High-bandwidth Digital Content Protection	
HDMI	MI High-Definition Multimedia Interface	
HDTV	High Definition Television	



8.2 Supported Resolutions

Resolution	Input	Output
640×480@60/72/75	✓	✓
720×480@60	✓	√
720×576p@50	✓	√
800×600@60/72/75	√	√
1024×768@60/70/75	~	~
1280×720@50/60	√	√
1280×720p@60	√	√
1280×768@60	√	√
1280×800@60	√	√
1280×1024@60	✓	√
1360×768@60	√	√
1600×1200@60	✓	\checkmark
1920×1080i@50/60	√	√
1920×1080i@60	√	√
1920×1080p@24/25/30/50/60	√	√
1920×1200@60 (RB)	√	√
3840×2160@24/25/30	✓	√
3840×2160@50/60 (YUV420)	✓	√
4096×2160@24/25/30	✓	√
4096×2160@50/60 (YUV420)	✓	✓

